

**CITY OF MIDDLETOWN  
PURCHASING DEPARTMENT**

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**ADDENDUM #4 TO BID #2013-008  
Wastewater Force Main –  
Mattabassett Regionalization Project**

**Date Issued: September 20, 2013**

**ALL BIDDERS ARE HEREBY ADVISED OF THE FOLLOWING AMENDMENTS TO THE CONTRACT BID DOCUMENTS:**

**ADDENDUM #4 INCLUDES THE FOLLOWING ITEMS:**

- ITEM 1 – REGULATORY APPROVALS**
- ITEM 2 – QUESTIONS AND ANSWERS**

**AND THE FOLLOWING ATTACHMENTS:**

- **REVISED TABLE OF CONTENTS**
- **REVISED DRAWING C507**
- **CITY OF MIDDLETOWN NOISE ORDINANCE**
- **EXHIBIT “F” – STATE OF CT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND U.S. ARMY CORPS OF ENGINEERS APPROVALS**

**INVITATION TO BID REMAINS THE SAME**

**Tuesday, October 1, 2013 at 11 AM**

**PLEASE VERIFY THAT YOU HAVE RECEIVED THIS NOTIFICATION IN THE SPACE BELOW AND FAX OR EMAIL THIS PAGE BACK TO THE PURCHASING DEPARTMENT.**

**FAX: 860-638-1995**

**EMAIL: [purchase@middletownct.gov](mailto:purchase@middletownct.gov)**

**BIDDER ACKNOWLEDGES RECEIPT OF ADDENDUM #4: \_\_\_\_\_**

**COMPANY NAME**

All bidders are hereby advised of the following amendments to the contract bid documents which are hereby made an integral part of the specifications for the subject project, prepared by the City of Middletown to the same extent as all other documents. All work shall conform to the standards and provisions of same. Bids submitted shall be deemed to include contract document information as shown in Addendum No. 4. General bidders shall notify sub-bidders that may be affected by this addendum as applicable. **Bidders shall be required to acknowledge receipt of this addendum in the space provided on the Bid Proposal Form 2-2.**

**Failure to acknowledge receipt of this addendum by the bidder may result in the rejection of their bid.** Bidders are directed to review changes to all portions of the work as changes to one portion may affect the work of another.

**\*\*\*BIDDER NOTE:** If you have already submitted a bid you shall be required to acknowledge receipt of this addendum under separate cover in a sealed envelope clearly marked with the bid number and description. This acknowledgment must be received by the time and date specified to be accepted by the City.

**TOTAL ADDENDA: 6 PAGES AND 4 ATTACHMENTS**

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Donna L. Imme, CPPB  
Supervisor of Purchases

## **ADDENDUM #4**

### **ITEM 1 – REGULATORY APPROVALS**

The terms and conditions of the approvals listed below are hereby made part of this Contract. Add the attached Exhibit "F" to the Specifications. Delete the table of Contents in its entirety and replace with the revised table of Contents attached to this Addendum #4.

- Connecticut Department of Energy and Environmental Protection Permit Number 20130199-KR
- Connecticut Department of Energy and Environmental Protection Flood Management Certification 201302054-FM
- U.S. Army Corps of Engineers General Permit Number NAE-2012-571

As of the date of this Addendum #4, the CT DEEP Permit Number 20130199-KR is in draft format. The final permit will be identical to the draft version with the exception of the completed date of issue and authorizing signature. A copy of the final permit will be furnished to the Successful Bidder.

### **ITEM 2 – QUESTIONS AND ANSWERS**

**Q1:** A request for information and consideration regarding the Bid Form and Specifications are listed below for your review.

1. Can Fusible C905® be considered an "Approved Equal" per Section 02615 Part 2.01 (F.)? Lay lengths and use of bells will be based on field requirements.
2. Can the fusion joint for of the Fusible C905® be considered "restrained" as is required per Section 02615 Part 2.01 (E) and Part 2.03? The Fusible C905® joint has been tested by third parties to meet or exceed industry restraint requirements including ASTM F1674 and ASTM D1785.

**A1: Fusible C905® is not considered as an "approved equal" to the pipe specified in Section 02615.**

**Q2:** Under Item No. 37 – Hydrostatic Testing, there are no specifics relating to Means & Methods. Under what pressure will the force main be tested and time? Further, are we required to segment test between each Junction Vault to insure the valves are tested? During flushing of the force main will a neutralizer agent be required prior to discharge?

**A2: The Contractor's means and methods shall conform to the requirements of AWWA C605 as specified in Section 02615 and the Contract Documents. The force main and valves shall be tested at the pressure and time duration specified Section 02615. A neutralizing agent is not required.**

**Q3:** Item 30 – Pipe Crossing under Railroad, what material will be used to fill the annular space?

**A3: No fill material is required in the annular space between the carrier and casing pipes.**

**Q4:** Item 3 – Rock / Boulder Excavation, is this item exclusively for trench work? If so, should an item be included for rock if possibly encountered under Item No. 30.

**A4: Bid Item #3 is for Rock Excavation, Disposal and Backfill anywhere within the normal limits of excavation as specified in Section 700, Measurement and Payment. If a Bidder interprets the boring logs and concludes that rock removal is necessary for Bid Item #30, Pipe Crossing Under Railroad, then he/she shall include the cost of such work thereof in the per linear foot unit price for that Item.**

- Q5: Junction Vault #1 is too close to the railroad tracks. Can it be moved southerly to make room for the vault sheeting and installation of transition piping?
- A5: **The track in the vicinity of Junction Vault #1 will be temporarily removed by others in conjunction with the Work, so the Contractor can have unobstructed access for the installing the Work in that area. Please refer to comment 4 in the July 3, 2013 letter from the Providence and Worcester Railroad Company in Exhibit D to the Specifications. Please note the location of Junction Vault #1 was revised per Addendum #3, but not due to proximity to the railroad.**
- Q6: The 30" PVC force main pipe has to go under existing utilities, storm and sanitary piping from STA 4+00 to STA 5+00, from STA 53+00 to 54+00 and from 55+50 to 56+00. It does not appear that conventional trenching methods can be used to install the 30" PVC pipe in these areas. Can the utilities be removed in these areas? Storm and sanitary lines may have to be reconnected if they cannot be temporarily supported. The proximity of all these pipes to each other prevents the use of temporary supports. Is jacking or directional drilling an option for these areas as well? If so a pay items needs to be added.
- A6: **The Contractor is responsible for the means and methods of installing the Work in accordance with the Contract Documents. Removal and reconnection of any existing utilities as necessary for the Work may be allowed at the discretion of the Engineer and approval by the affected utility owner(s). Jacking and directional drilling are not options for installing the force main within Dekoven Drive and Bridge Street.**
- Q7: Junction Vault #3 appears to need additional foundation support. Will this be a field condition and considered extra work?
- A7: **No. Please refer to Q3/A3 under Item 8, Questions and Answers, in Addendum #3.**
- Q8: To what degree will the Buckeye fuel pipeline be relocated between STA 75+00 to STA 85+00? Proximity to Junction Vault #4 is a concern. Also, the 30" force main is located parallel and under this fuel line in some of this area.
- A8: **The Buckeye fuel pipeline will not be relocated. Information regarding existing utilities shown on the Drawings is not guaranteed and is for informational purposes only. The Contractor is responsible for field verifying existing utilities affected by the Work and shall notify the Engineer of any discrepancies between the Drawings and actual conditions encountered in the field. The Engineer reserves the right to make adjustments to the location of the proposed force main in order to accommodate the Work.**
- Q9: A bid item (Item No. 6) has been provided for test pits. The estimated bid quantity for this item is 210 cubic yards. As stated in Section 700 of the specifications this item includes "gravel backfill in paved areas, pavement replacement including saw cutting and sealing, lawn restoration, curb replacement, driveway and sidewalk replacement and appurtenant work". There are seven (7) test pits shown on the drawings. The estimated quantity associated with these test pits is no more than twenty (20) cubic yards. How can the contractor be expected to include the appropriate costs for the various component items listed above when only ten (10) percent +/- of the estimated bid quantity is represented on the contract plans? It is requested that the bid quantity be revised to more accurately reflect the work shown on the drawings.
- A9: **The Contractor shall dig test pits at the locations shown on the Drawings and where directed by the Engineer. The estimated quantity is intended to encompass test pits deemed necessary by the Engineer during the prosecution of the Work in addition to those shown on the Drawings.**
- Q10: Reference is made to the response for Question 17 in Addendum No. 2 which states that the bid item for "Stone Crossing" (Item 28) will be measured and paid for on a "Cubic Yard" basis. When this item is measured for payment will the volume of the 6" granular fill base be included in the calculations?

**A10: Yes, granular fill (bank-run gravel) is included in the unit of measure and payment for Bid Item #28.**

Q11: There are several areas along the route of the proposed 30" force main that are designated as "Areas of Environmental Concern (AOEC)" on the drawings. A number of these areas fall outside the limits of the existing bituminous pavement. According to the specifications, all materials excavated within the limits of the AOEC's are to be hauled to the WSA for testing and offsite disposal. Please confirm our understanding that trenches within these areas are to be backfilled with bank run gravel and that the gravel backfill material will be measured and paid for under Item No. 5.

**A11: Not all materials excavated from AOECs need to go to the WSA. A trench within a particular AOEC may be backfilled with suitable material excavated from the same AOEC only under the conditions specified in Section 02314, Controlled Materials Excavation. Unsuitable excavated AOEC material and excess excavated AOEC material shall be transported to the WSA.**

Q12: There is a Section 642 Temporary Detour Signing. Can any areas of this project be detoured, particularly Dekoven Drive?

**A12: Dekoven Drive may be detoured. No City street or a portion thereof shall be closed without a special permit and bond required by Section 262-38 of the Middletown Code of Ordinances. If the Contractor needs to close any City street, street lane or any portion of a lane, or to perform work in any manner that would require any vehicles to have to stop, slow down, or deviate from the vehicle lane in any manner, the Contractor shall hire police for directing traffic. Streets closed by the Contractor's activities shall be reopened at the end of the work day.**

Q13: Is there a municipal owned site available for locating the Owner's field office trailer?

**A13: Yes, the Engineer's field office trailer shall be located at the materials and equipment staging area at Roosevelt Park, off of Miller Street in the City of Middletown. Please refer to Drawing No. C509.**

Q14: The pay item for the 30" PVC force main mentions fabric yet it is not shown in the detail on Sheet C507. Is it required and if so where and to what extent?

**A14: Pipe bedding shall be wrapped geotextile fabric with a minimum 12" overlap as stated in Note 3 of the Trench Details in the revised Drawing No. C507 attached to this Addendum #4.**

Q15: What is the anticipated project start date?

**A15: The anticipated start date is December 2013 which is contingent upon the State of Connecticut Department of Energy and Environmental Protection's review and approval of the apparent and responsible low bid selected by the Owner.**

Q16: Will work be allowed over the 2013-2014 winter period?

**A16: Yes.**

Q17: It is mentioned in the Specifications that transplanting may be required as ordered by the Engineer. Has any more thought been given to this item as to the scope of work or if it is necessary?

**A17: No trees and shrubs are designated for transplanting in this Contract.**

Q18: There are a number of areas where the pipeline is close to the RR tracks and will require sheeting because the railroad influence line is being infringed upon. Can you verify what the influence slope angle is and where it starts?

- A18:** A portion of the railroad track will be temporarily removed by others in conjunction with the Work. Please refer to comment 4 in the July 3, 2013 letter from the Providence and Worcester Railroad Company in Exhibit D to the Specifications. The influence slope angle is 45 degrees, starting from the end of the railroad tie, 4'-3" from the centerline of the railroad.
- Q19:** The detail for the "Gravel Access Road" as well as the detail for the "Stone Crossings" calls for the installation of granular fill. I have been unable to find a written specification for this material. What is the material specification for granular fill?
- A19:** Granular Fill material is Bank-Run Gravel which is specified in Section 106.
- Q20:** Section 700 Measurement and Payment – Item 38B, and Section 02710-1.06E – Are there specifications and detail information for the permanent steel conductor casing. Depth? Steel spec?
- A20:** The purpose of the steel conductor casing is to support the fill soil during the drilling process and prevent inadvertent drill fluid returns in the cased area where there is shallow soil cover. To accomplish this purpose, the casing shall be installed through the fill material plus an adequate depth into the underlying material to form a seal at the base of the casing against drill fluid by-passing the casing seal into the fill material. Required casing length shall be determined at each location by the Contractor for meeting the casing purpose based on the geotechnical data provided in the Contract Documents. The casing is for construction purposes only and is sacrificial to prevent damage to the product pipe during installation. As the casing is for construction only, the design and material selection of the steel casing shall be the responsibility of the Contractor. Specification Section 02170 paragraph 1.06E requires a minimum 36-inch diameter casing. The remaining properties and dimensions are the responsibility of the Contractor to design based on the Contractor's means and methods selected for the installation process. The casing shall not contain any internal features or rings that could damage the product pipe during the installation process.
- Q21:** Plan sheet C101 (directional drill data northing & easting) and C104 (station 22+92) exit location is very close to the railroad tracks. Can this be moved away from the railroad tracks to lessen the risk? What is the minimum offset from the railroad tracks?
- A21:** The railroad track in the area in question will be temporarily removed by others in conjunction with the Work. The Contractor will have unobstructed access to the design exit location shown on the Drawings. Please refer to comment 4 in the July 3, 2013 letter from the Providence and Worcester Railroad Company in Exhibit D to the Specifications.
- Q22:** Section 02170–1.05G - Noise mitigation - Middletown Code of Ordinance Section 206 states hour restrictions, but does not mention decibel levels. Can work hours be extended?
- A22:** The decibel limits are specified in Section 206-9 of the Middletown Code of Ordinances. Reference the complete noise ordinance attached to this Addendum #4. The Owner will consider reasonable requests for extended working hours if needed by the Contractor in order to perform the Work.
- Q23:** Section 02170 – 2.05A & 3.03L - If the trace wire does not successfully pull back. Will locator balls be acceptable for pipe location, or will the trace wire need to be reinstalled?
- A23:** Locator balls is not be an acceptable substitution to the tracer wire for the directional drilled installations. The tracer wire specified in Section 02170 paragraph 2.05A has a minimum required breaking load of 1,150 pounds. Section 02170 paragraph 3.03L requires two wires secured to the pipe. The second wire is a backup should one wire fail during the installation process. It is suggested that the wires be placed at different positions on the pipe to improve the chance of installation success. Should both wires fail during

**the installation process, then a new installation of the tracer wire only, or re-drilling of the product pipe, or removal of the product pipe then re-installation with new tracer wires will not be required.**

**Q24:** Section 02170 – 3.03R – Is the pig to be ½” less than the I.D. of the pipe, or ½” less than the I.D. of the fusion beads? Will the beads need to be removed?

**A24:** The pig diameter shall be 1.5 inches less than the minimum inside diameter of the pipe tube, excluding the fusion weld beads. Revise paragraph 3.03R of Specification Section 02170 to read as follows:

**R.** Verify that the installed pipe is acceptable by successfully passing a pig with minimum outside diameter of 1.5 inches less than the inside diameter of the pipe (not including the fusion weld beads)...

Removal of the weld beads from the inside surface of the pipe is not required, though the Contractor may elect to do so at his discretion.

**Q25:** Section 02170 – 3.04 – Can you clarify the method for visual inspection?

**A25:** Delete paragraph 3.04A in its entirety from Specification Section 02170 and replace with the following:

**A.** Acceptance of the installation shall be based upon successful passage of the pig as specified in paragraph 3.03R of this Section and successful completion of the hydrostatic pressure test.

**Q26:** Plan Sheet C114 – C117 – Can the depth be lowered on HDD#1 to mitigate the possibilities for inadvertent returns?

**A26:** The purpose of the HDD #1 profile elevation is to provide a reasonable 20 feet of clearance between the existing Buckeye Pipeline and the proposed HDD Force Mains to prevent damage to the existing Buckeye Pipeline. This clearance distance was selected by the Engineer and is not a requirement of Buckeye Partners. This clearance distance is based on the “As-Built” information provided by Buckeye Partners and reasonable tolerance for drilling guidance systems. Tighter tolerances resulting in lower elevations are possible with certain guidance systems and quality of operators, but the drill progress typically is reduced to accommodate the longer time necessary for tracking progress. As such, the Contractor may elect to reduce clearance between the new installations and the Buckeye Pipeline to 10 feet, and the clearance between the new installations to 5 feet. In any case, the Contractor is fully responsible for any damage to existing or new facilities and/or re-drilling or replacement of the product pipe at no additional cost to the Owner, should the drill paths intercept or approach the Buckeye Pipeline.

**Q27:** Have Engineer bore calculations been completed on the pipe and bore? (Critical collapse, maximum pressures, etc.) Can we get a copy if the calculations have been completed?

**A27:** The Engineer’s calculations will not be shared with prospective Bidders. The Contractor will be provided with a full set of these calculations prior to start of the drilling and after receipt of the drilling submittals. The purpose of the submittals is for the Contractor to demonstrate his understanding of the Project. Once the submittals have been received, then the engineering calculations will be shared with the Contractor for discussion of comparative numbers between the Contractor and the HDD Design Engineer associated with project risks and expectations prior to drilling.

**Q28:** Only one pipe jacking sub was at the prebid meeting. Can we solicit other pipe jacking prices?

**A28:** Yes, prime Bidders can solicit pricing from other Subcontractors.